

CLAIM AMENDMENTS

IN THE CLAIMS

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1.-2. (Cancelled)

3. (Currently Amended) A device in accordance with Claim [1]20, wherein the energy source, a control circuit controlling the energy source, the compensation capacitor, and the piezoelectric actuator are accommodated in a housing, whereby the control circuit can be controlled by an external controller.

4. (Currently Amended) A device in accordance with Claim [1]20, wherein the compensation capacitor has a capacitances of around 10,5 μ F.

5. (Previously Presented) A device according to Claim 3, wherein the housing is a fuel injection valve housing.

6. (Previously Presented) A device according to Claim 3, further comprising a temperature sensor coupled with the external controller for determining the temperature of the housing.

7. (Cancelled)

8. (Currently Amended) A device according to Claim [2]20, further comprising a temperature sensor coupled with the actuator and electrically coupled with a measurement line used to transmit the temperature value of the actuator to the controller.

9.-10. (Cancelled)

11. (Currently Amended) A method according to Claim [9]21, further comprising the step of sensing the temperature of the actuator.

12.-13. (Cancelled)

14. (Currently Amended) A valve in accordance with Claim [12]22, wherein the energy source, a control circuit controlling the energy source, the compensation capacitor, and the piezoelectric actuator are accommodated in a housing, whereby the control circuit can be controlled by an external controller.

15. (Currently Amended) A valve in accordance with Claim [12]22, wherein the compensation capacitor has a capacitances of around 10,5 μ F.

16. (Previously Presented) A valve according to Claim 14, wherein the housing is the housing of the fuel injection valve.

17. (Previously Presented) A valve according to Claim 14, further comprising a temperature sensor coupled with the external controller for determining the temperature of the housing.

18. (Cancelled)

19. (Currently Amended) A valve according to Claim [13]22, further comprising a temperature sensor coupled with the actuator and electrically coupled with a measurement line used to transmit the temperature value of the actuator to the controller.

20 (Previously Presented) A device for controlling a piezoelectric actuator for use in a fuel injection valve of an internal combustion engine, said device comprising:

- an energy source to supply energy to the actuator,
- a controller for controlling the energy source,
- a measurement line coupled with the controller and actuator to determine a voltage at the actuator, and
- a compensation capacitor connected in parallel with the actuator having a capacitance such that for a constant amount of energy delivered by the energy source, an extension of the actuator is almost constant across a temperature range, wherein the energy source, the controller, and the capacitor are accommodated in a housing and connected via a cable with the actuator.

21 (Previously Presented) A method for controlling a piezoelectric actuator for use in a fuel injection valve of an internal combustion engine, said method comprising the steps:

- supplying the actuator with energy, wherein an extension of the actuator corresponds with a predetermined response to changes in temperature,
- compensating the extension of the actuator via a capacitor coupled in parallel with the actuator, said capacitor having a capacitance wherein for a constant amount of energy delivered by an energy source, the extension of the actuator is almost constant across a temperature range, and
- sensing the voltage of the actuator.

22. (Previously Presented) A fuel injection valve comprising:

a piezoelectric actuator,

an energy source to supply the actuator with energy, wherein an extension of the actuator corresponds with a predetermined response to changes in temperature,

a controller for controlling the energy source,

a compensation capacitor connected in parallel with the actuator having a capacitance such that for a constant amount of energy delivered by the energy source, extension of the actuator is almost constant across a temperature range, and

a measurement line coupled with the actuator used to determine the voltage at the actuator, wherein the energy source, the controller, and the capacitor are accommodated in a housing and connected via a cable with the actuator.